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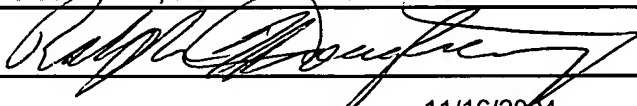
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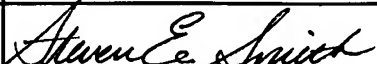
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PATENT

THE UNITED STATES PATENT AND TRADEMARK OFFICE
PATENT OPERATIONS

Art Unit: 3643
Applicant: Sandra Leigh Robbl
Serial No: 10/729,117
Filed: December 05, 2003
Title: CHILD SUPPORT DEVICE

Charlotte, North Carolina
November 16, 2004

Hon. Commissioner of Patents and Trademarks
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Dear Sir:

SUBMISSION OF CERTIFIED PRIORITY DOCUMENT

Enclosed herewith is a certified copy of Australian Provisional Patent Application PR5503 to support the priority claim in connection with the above-referenced case.

Respectfully submitted,

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RHD/SES
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Attorney's Docket 3901-CIP



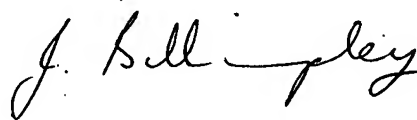
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I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. PR5503 for a patent by SANDRA LEIGH ROBB and MARGARETH THULLAN LILLEBETH CURRAN as filed on 06 June 2001.

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WITNESS my hand this
Seventh day of September 2004



JULIE BILLINGSLEY
TEAM LEADER EXAMINATION
SUPPORT AND SALES



ORIGINAL
AUSTRALIA

Patents Act 1990

PROVISIONAL SPECIFICATION

Invention Title: "Child Support Device"

The invention is described in the following statement:

"Child Support Device"

Field of the Invention

The invention relates to a child support device.

The invention has been devised particularly although not solely for use in relation
5 to young children under 18 months of age.

Background Art

It is often necessary to support and restrain young children for a number of reasons including for nappy changing, feeding, amusement and safety.

A number of prior art devices are known which are designed to support and
10 restrain young children for the above reasons.

However, difficulties have been encountered with these prior art devices for safety reasons. The devices are often not provided with adequate restraining systems to prevent the child from rolling out of the device. Furthermore, some of the devices may roll up on themselves on movement of the child causing a safety
15 risk. Many of the prior art devices are bulky and difficult to assemble or transport.

The present invention attempts to at least partially overcome some of the above difficulties.

Disclosure of the Invention

20 The present invention provides a child support device comprising a base section to provide a resting area for a child and a harness means attached to the base section to retain the child within the resting area, the base section being laterally rigid so that the device remains stable when the child is harnessed within the resting area.

When the child is held by the harness means within the resting area, the lateral rigidity of the base section prevents the child from rolling over sideways. The lateral rigidity also retains the device in a firm position and prevents the device from rolling up into a sausage shape on movement of the child.

- 5 Preferably, the base section presents a cushioned support surface on which the child may rest.

- The base section preferably comprises an upper layer and a lower layer. The upper layer is formed of soft material to present the cushioned surface. The lower layer is formed of material substantially more rigid than the upper layer to
- 10 provide the stability. The upper layer may typically be a soft foam or like cushioning material and the lower layer may typically be a thin board material.

The base section may be enclosed in a base cover means. The base cover means may conveniently be plastic or other liquid impermeable material for ease of cleaning.

- 15 The base section preferably comprises a first section hingedly connected to a second section at a first junction.

- With this arrangement, the first and second sections can be arranged in various angular positions to each other. In a first condition, the first and second sections are planar to provide a flat surface so that the child may rest in the lying down
- 20 position such as for nappy changing.

In a second condition, the second section may be positioned in a generally upright position such as when using the device on a chair. In this condition, the device provides a high chair for the child which can be placed on a conventional chair.

- 25 In a third condition, the second section may be disposed at an obtuse angle to allow positioning of the device in a reclining position for example when the

second section is supported by a cushion. In this way, the device may be used as a bouncinette for the child.

In a fourth condition, the first section and the second section may be folded about each other to allow compact flat storage of the device or to allow
5 transporting of the device.

The base section may further comprise a head section adjacent the second section on which the head of the child may rest. The head section and the second section may be hingedly connected at a second junction. The head section is preferably in the form of soft cushioning for comfort and is not layered
10 like the first and second sections.

The harness means is conveniently in the form of strap means. The strap means may comprise a pair of sash straps adapted to be positioned crosswise over the trunk of the child.

Each sash strap preferably comprises two strap sections adapted to be fitted
15 together. This allows for fastening and unfastening of each sash strap. Each sash strap may further comprise an adjusting means such as an adjustable clasp to clasp the two strap sections together and to allow for adjustment of the lengths of the sash straps if necessary.

In one arrangement, a first end of the first sash strap may be positioned on the
20 second section of the base section remote from the first junction and the opposing end of the first sash strap may be positioned on an opposed side of the first section of the base section proximate the first junction. The second sash strap may be positioned in an opposing manner to that of the first sash strap such that the two sash straps are in a crossed array. In use, the crossed array of
25 the sash straps preferably passes over the trunk of the child to secure the child within the resting area of the device.

The strap means may further comprise a central strap located on the first section adapted to be connected to the sash straps. The central strap may typically be

provided with fastening means to fasten the central strap in position over the sash straps.

Once the child is secured by the two sash straps, the central strap may be passed between the legs of the child and fastened over the sash straps to
5 provide extra support to retain the child in the resting area. Use of the central strap is preferable when the device is used in the second condition for example on a chair, or in the third condition in a reclining position to assist in safely retaining the child with the resting area of the device.

The device may further comprise a support means, typically in the form of a
10 detachable support strap. One end of the support strap may be positioned on the base section adjacent the first junction and the other end of the support strap may be positioned on an opposing side of the base section adjacent the first junction.

The support strap may be placed around the object on which the device is
15 resting to provide extra stability to the device, for example in the case of use on a chair around the back of the chair. The support strap may be conveniently provided in two support portions connected by means of a connecting means such as a clasp.

The support strap may also function as a shoulder strap to carry the device when
20 in the folded condition as will be explained later.

The invention further provides a child support device comprising a base section to provide a resting area for a child, the base section comprising an inner section and an outer cover means, the inner section being received within the outer cover means, and a harness means attached to the base section to retain the
25 child within the resting area, the base section being laterally rigid so that the device remains stable when the child is harnessed within the resting area.

The base section preferably presents a cushioned surface on which the child may rest. The base section preferably comprises an upper layer and a lower layer.

5 The outer cover means is preferably provided with a cover opening into which the inner section may be inserted.

The outer cover means is preferably of similar dimension to that of the inner section so that the inner section fits snugly into the outer cover means.

10 The base section preferably comprises a first section hingedly connected to a second section via a first junction. The base section may further comprise a head section hingedly connected to the second section via a second junction.

The harness means may be in the form of strap means, typically a pair of sash straps adapted to be positioned crosswise over the trunk of the child.

The strap means may further comprise a central strap adapted to be connected to the sash straps.

15 The base section may be further provided with a support strap. One end of the support strap may be positioned on the base section adjacent the first junction and the other end of the support strap may be positioned on an opposing side of the base section adjacent the first junction. For convenience, the support strap may be detachable from the outer cover means for example by means of a clip
20 and loop system.

The child support device is designed to be conveniently folded into a compact shape. Folding of the device typically occurs about the first and second junctions.

25 The base section may be provided with a closure means to enable the device to be folded together to form a compact bag shape. In this form the harness is typically retained inside the folded first and second sections of the device for

tidiness. The closure means preferably comprises a first closure portion and a second closure portion. The first closure portion is preferably located on the head section and is adapted to engage with the second closure portion which may be located on the first section.

- 5 The first closure portion may typically be a strap with a portion of Velcro which may engage with the second closure portion which is in the form of a corresponding piece of Velcro.

- Transporting the device preferably entails folding the first section towards the second section about the first junction. The harness and head section are
- 10 retained between the folded sections and the first closure portion and the second closure portion are sealed to form a closed unit. The closed unit may be carried by attaching the support strap to the unit and using the support strap as a shoulder strap.

- The outer cover means may be provided with additional useful features such as
- 15 pockets or clips for holding such items as bottles, toys, food and baby nappies.

- The base section may further comprise a cushion attachment means whereby a cushion may be attached to the device. The cushion attachment means may be for example a pocket in which a deflated cushion resides. When the device is used in the second condition, the cushion may be inflated as needed to provide
- 20 further height for seating of the child. The cushion attachment means is preferably located on the first section.

- The base section may also be provided with connecting means to allow the device to be attached to a compatible bag. Suitable connecting means may be a zipper where one half of the zipper is provided on the base section in a suitable
- 25 position and the other half of the zipper is provided on the bag. In this way the folded device may be attached to the bag, for example a baby bag holding baby accessories such that the device and bag may be transported as a single unit. As an alternative option, the bag may be used to transport the folded device within the interior of the bag.

In a further arrangement, the device may be carried in the form of a back pack. In this form, the device is folded along the first junction and closed by means of the closure means. The sash straps are retained on the outside of the device to allow attachment of the straps to the shoulders of a user. The sash straps are
5 adjusted from the crossed array to a straight arrangement to form shoulder straps for the user.

Thus it can be seen that the child support device is a versatile device that may be readily adapted for use as a changing mat, a support for resting on a seat or in an angled formation as a bouncinette. Furthermore, the device may be
10 conveniently carried in a number of ways, such as by simply folding in a flat position, by means of a shoulder strap or in the form of a back pack.

Brief Description of the Drawings

The invention will be better understood by reference to the following description of two embodiments thereof as shown in the accompanying drawings in which:

15 Figure 1 is a schematic view of a child support device according to a first embodiment (excluding the harness);

Figure 2 is a sectional side view of the device shown in Figure 1;

Figure 3 is a cross-section along the line 3-3 of Figure 1;

20 Figure 4 is a perspective view of the child support device according to the first embodiment;

Figure 5 is a perspective view of the child support device according to a second embodiment in a first condition;

Figure 6 is a perspective view of the child support device of Figure 5 in use supporting a child;

Figure 7 is a perspective view of the reverse side of the child support device of Figure 5;

Figure 8 is a perspective view of the child support device according to the second embodiment in a second condition;

5 Figure 9 is a perspective view of the child support device of Figure 8 in use supporting a child;

Figure 10 is a perspective view of the child support device of Figure 8 in use supporting a child and used in association with a cushion;

10 Figure 11 is a perspective view of the child support device according to the second embodiment in a third condition;

Figure 12 is a perspective view of the child support device of Figure 8 in use supporting a child;

Figure 13 is a perspective view of the child support device according to the second embodiment in a fourth condition;

15 Figure 14 is a perspective view of the child support device according to the second embodiment in the fourth condition and attached to a bag;

Figure 15 is a perspective view of the child support device according to the second embodiment positioned inside the bag; and

20 Figure 16 is a perspective view of the child support device according to the second embodiment carried in the form of a back pack.

Best Mode(s) for Carrying Out the Invention

Referring now to Figures 1 to 16 of the accompanying drawings, there is shown a child support device 10 comprising a base section 12 which defines a resting area 14 for a child 16. The device also comprises a harness means 18.

The base section comprises an upper layer 20 and a lower layer 22 as shown in Figure 3. The upper layer 20 is formed of soft foam material which presents a cushioned surface on which the child 16 is supported. The lower layer 22 is in the form of a thin wooden board.

- 5 Since the lower layer 22 is of a material which is substantially more rigid than the upper layer 20, the base section 12 is laterally rigid which retains the device 10 in a firm position. The lateral rigidity also prevents the device 10 from rolling up on itself on movement of the child.

10 The base section 12 is enclosed in a base cover means 24 which is formed of plastic material which can be easily wiped for cleaning purposes.

As shown in the first embodiment in Figure 4, a harness means 18 is attached to the base section 12 for retaining the child. In this form which has particular application in a hospital or other like environment, the base section presents a clean surface on which the baby can be supported. Given that the base cover
15 means 24 is made of a plastic material, it can be easily sterilised and cleaned.

The base section 12 comprises a first section 26, a second section 28 and a head section 30. The first and second sections are hingedly connected together at a first junction 32. The second section 28 and the head section 30 are hingedly connected together at a second junction 33.

- 20 The harness means 18 is in the form of two sash straps 34 comprised of two strap sections 36. The strap sections 36 are connected together and length adjustable by means of an adjustable clasp 37. As can be seen in Figure 4, a first end 38 one of the sash straps 34 is positioned on the second section 28 of the base section 12 remote from the first junction 32 and the opposing end 40 of
25 the strap is positioned on an opposed side of the first section of the base section proximate the first junction 32.

The second sash strap 34 may be positioned in an opposing manner to that of the first sash strap 34 such that the two sash straps 34 are in crossed array as

shown in Figure 4. In use, the crossed array passes over the trunk of the child to secure the child within the resting area of the device.

The harness means 18 further comprises a central strap 42 located on the first section 26. The central strap 42 is provided with fastening means 44 to fasten
5 the central strap in position over the sash straps 34.

The device 10 according to the second embodiment also comprises a base section 12 with an outer cover means 46 of material and an inner section 48 which is received within the outer cover means 46. The outer cover means 46 comprises a cover opening (not shown) into which the inner section 48 is
10 inserted. The outer cover means 46 is of similar dimension to that of the inner section 48 so that the base section fits snugly into the outer cover means 46.

The base section 12 is provided with a detachable support strap 58 seen in use in Figures 8 and 9. The support strap 58 may be attached or detached by means of support loops 60 as shown in Figures 7 and 13.

15 As shown in Figure 7, the reverse side of the outer cover means 46 is provided with a storage pocket 62 and zipper means 80.

The device 10 is shown in use in the Figures in various conditions.

Figures 5 and 6 shows the device in use in a first condition. The first and second cover sections are in planar arrangement to provide a flat surface so that the
20 child may rest in the lying down position for nappy changing. In use, the strap sections 36 are opened and the child is placed on the resting area 14. The strap sections 36 are then closed to retain the child within the resting area to allow for example nappy changing.

In the second condition as shown in Figures 8 to 10, the second section 28 and
25 the head section 36 are positioned in a generally upright condition such as when the device 10 is in use on a chair. In this condition and as shown in Figures 8 to

10, the support strap 58 is used to retain the device 10 safely against the chair 70.

Also in the second condition, the device 10 may be used in association with a cushion 72 as shown in Figure 10. The cushion 72 is inserted into a pocket (not shown) on the first cover section 50. In this way, the child may be positioned at a suitable height for example for eating.

In a third condition as shown in Figures 11 and 12, the second section 28 is disposed at an obtuse angle to the first section 26 to allow positioning of the device 10 in a reclining position when supported by a pillow 74. In this way and as shown in Figure 12, the device may function as a bouncinette to allow the child 16 to view the surroundings.

As shown in Figure 13, the device may be carried in the folded condition. In this way the first section 26 and the second section 28 are folded about the first junction 32 with the sash straps 34 and the head section 30 being retained within the two folded first and second sections. These latter sections are clamped together by means of the first closure portion 66 and the second closure portion 68 as seen in Figure 13. The support strap 58 is attached to the loops 60 for carrying of the device.

The folded form of the device may be attached to a bag 76 by means of zipper means 80, the bag 76 being provided with a corresponding second zipper means 82 as shown in Figure 14. In this form, the support strap 58 is attached to bag loops 78 to form carrying straps for the bag.

Alternatively, the folded form of the device 10 may be placed in the bag 76 when the bag is empty and the device 10 may be carried in this way as shown in Figure 15.

The folded device 10 may be transported in the form of a backpack. Figure 16 shows the device 10 with the sash straps 34 removed from the crossed array to

provide straight straps to form the shoulder straps of the device in the form of a backpack.

Thus, it can be seen that the child support device is versatile and can be easily adapted to form a variety of useful functions. Conveniently, the device may be
5 easily carried in a number of compact forms.

It should be appreciated that the scope of the invention is not limited to the scope of the two embodiments described.

Throughout the specification, unless the context requires otherwise, the word "comprise" or variations such as "comprises" or "comprising", will be understood
10 to imply the inclusion of a stated integer or group of integers but not the exclusion of any other integer or group of integers.

Dated this sixth day of June 2001.

SANDRA LEIGH ROBB
and
MARGARETH THULLAN LILLEBETH CURRAN
Applicants

Wray & Associates
Perth, Western Australia
Patent Attorneys for the Applicants

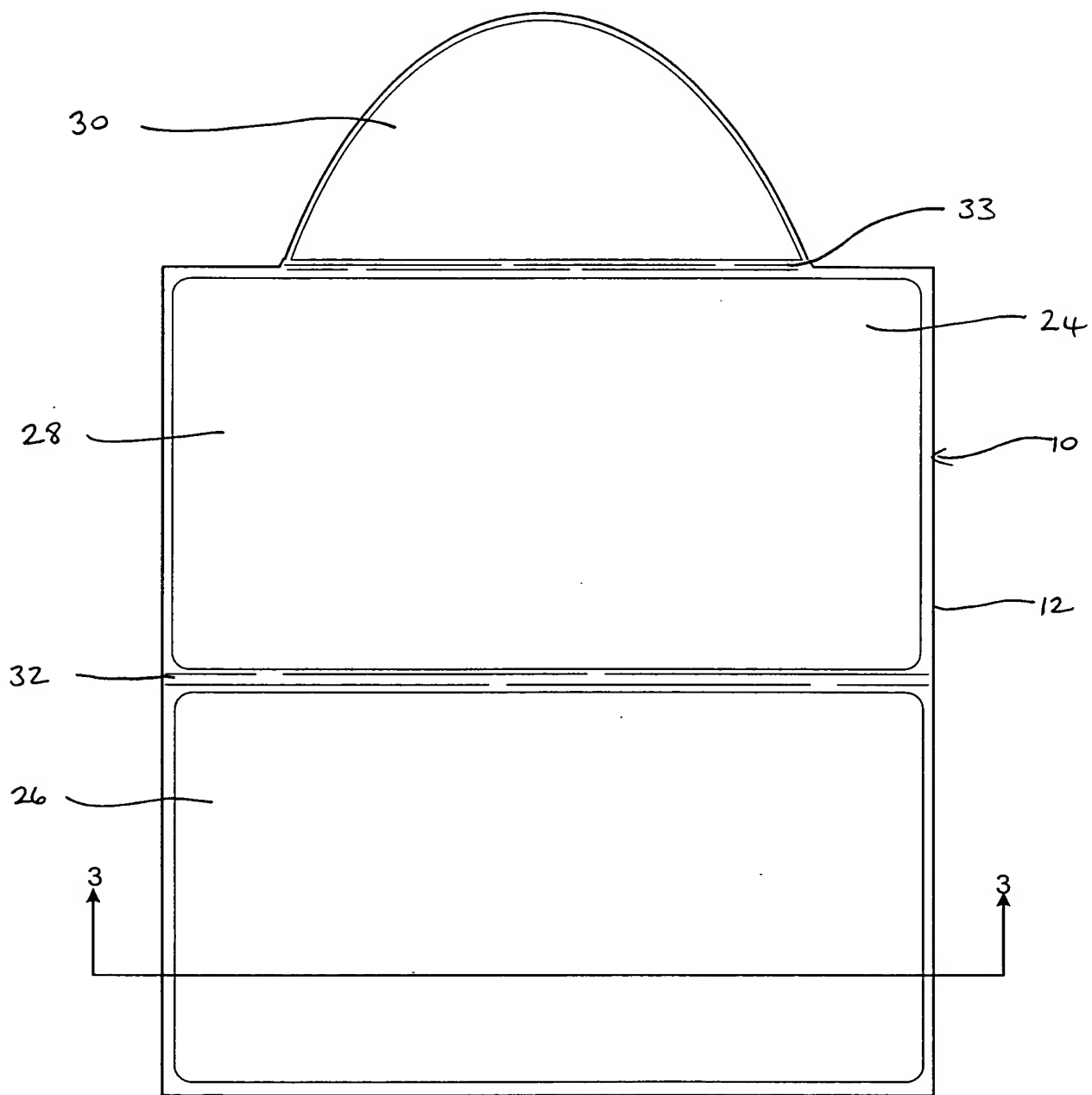


Fig. 1.

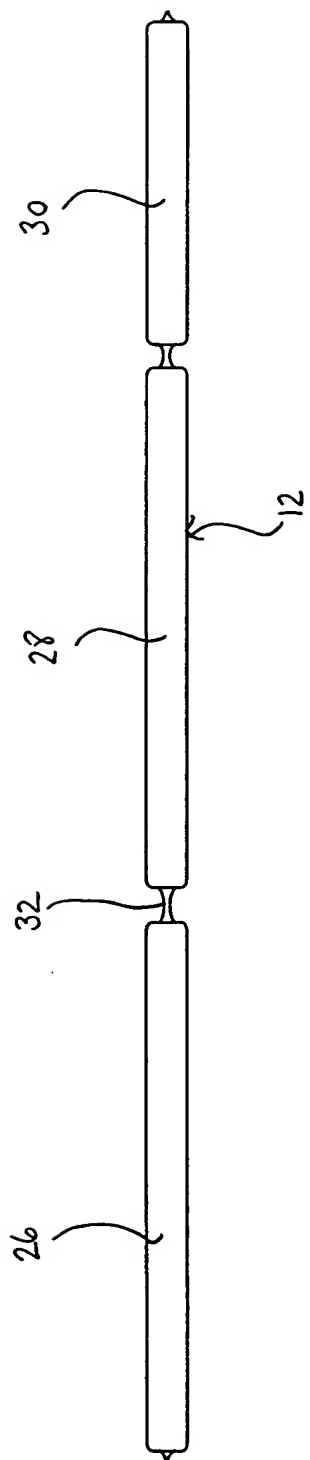


Fig. 2

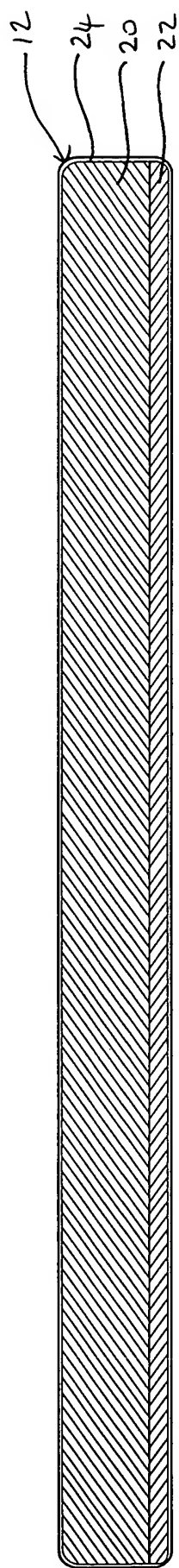
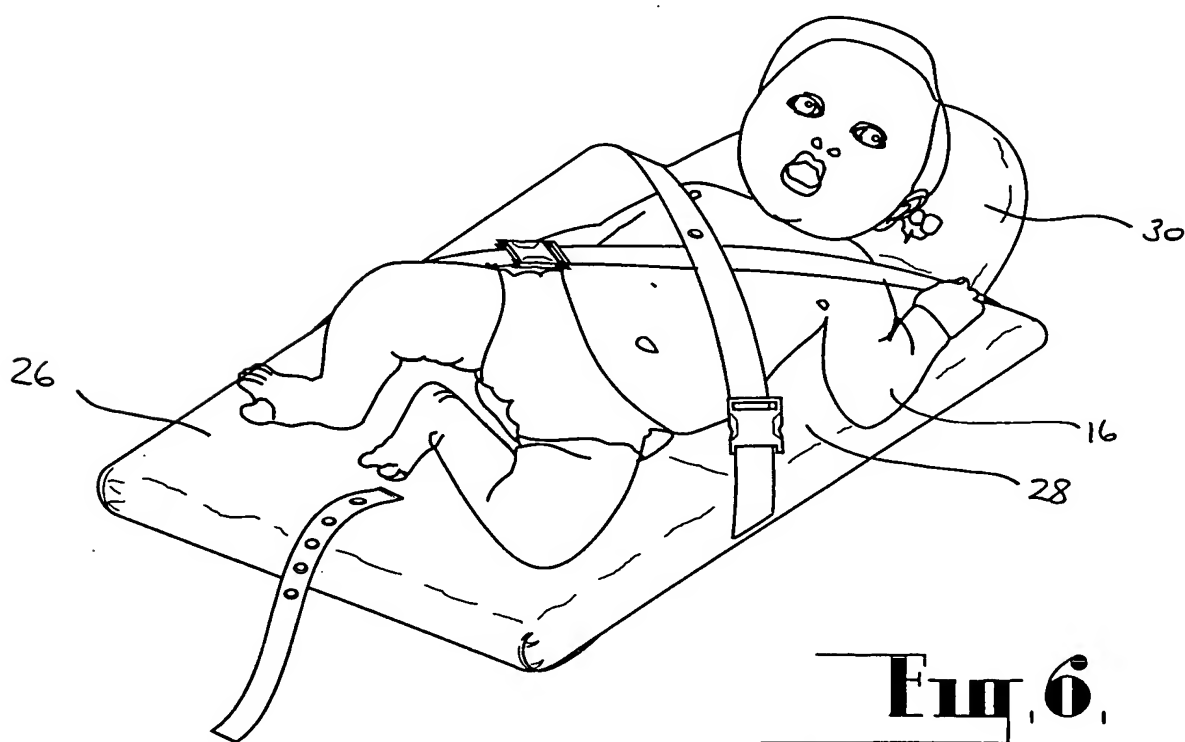
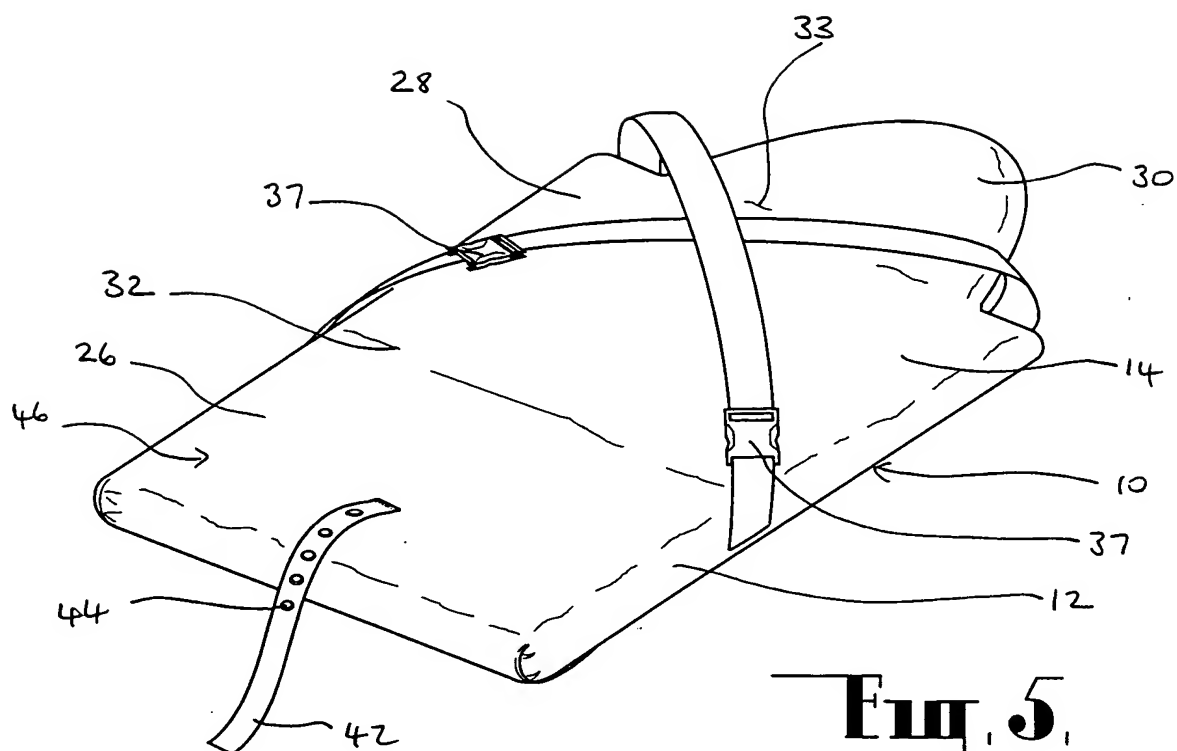


Fig. 3



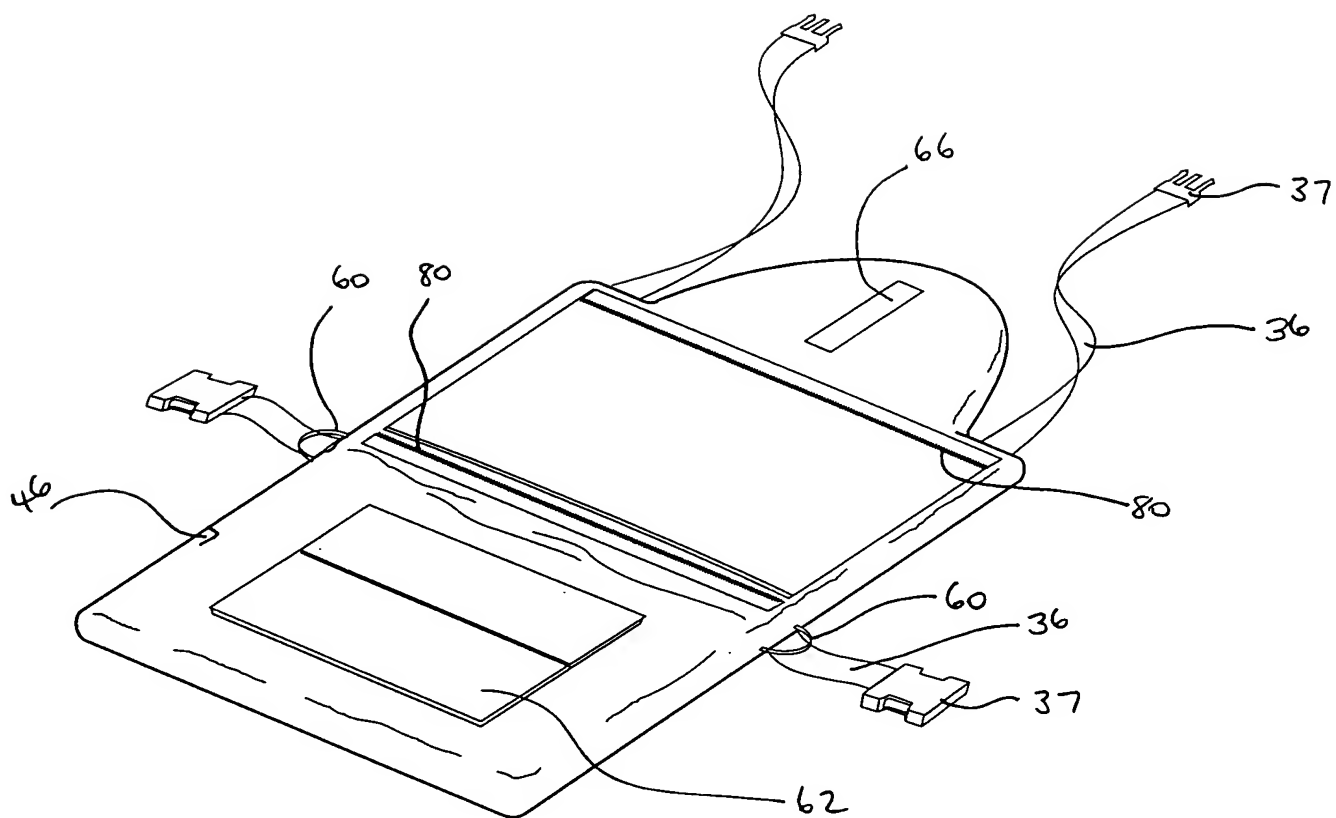


Fig. 7.

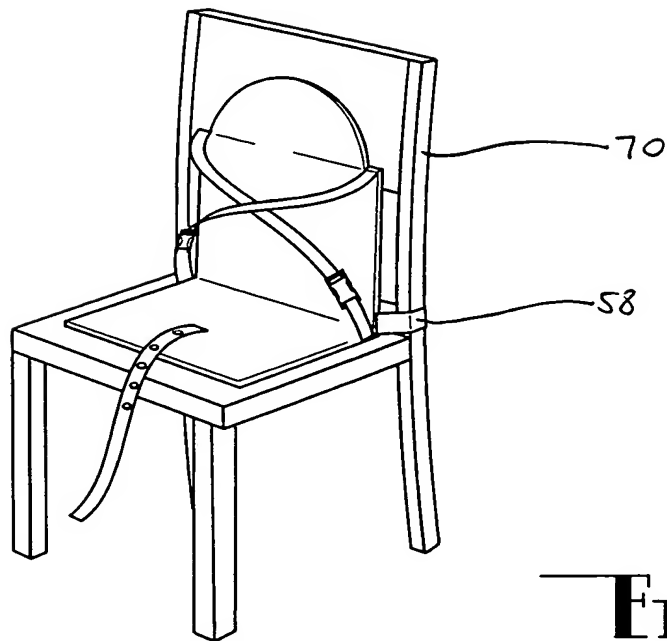


Fig. 8.

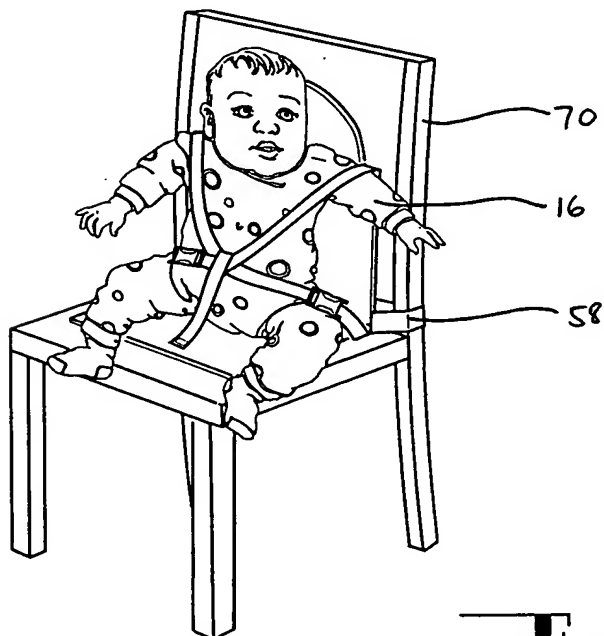


Fig. 9.

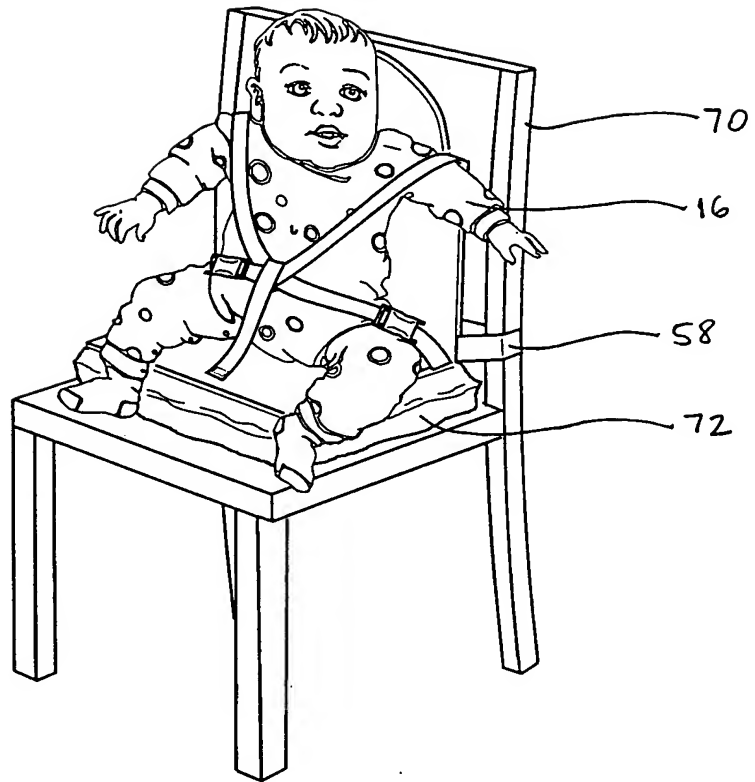
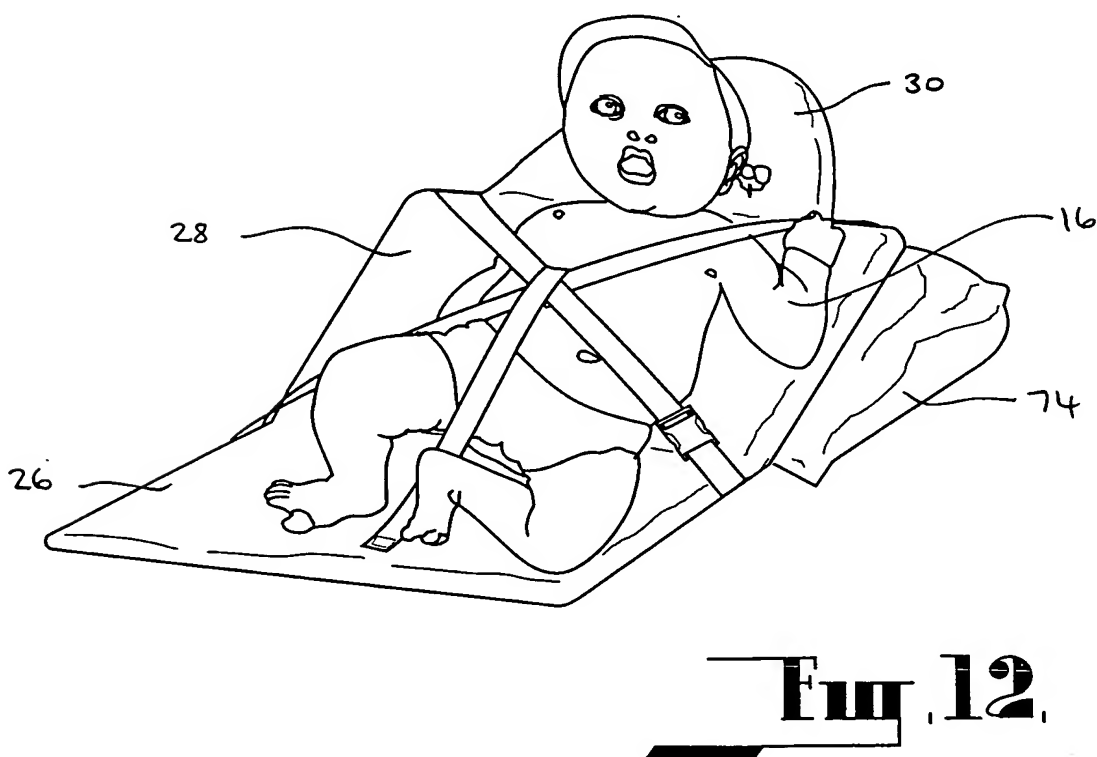
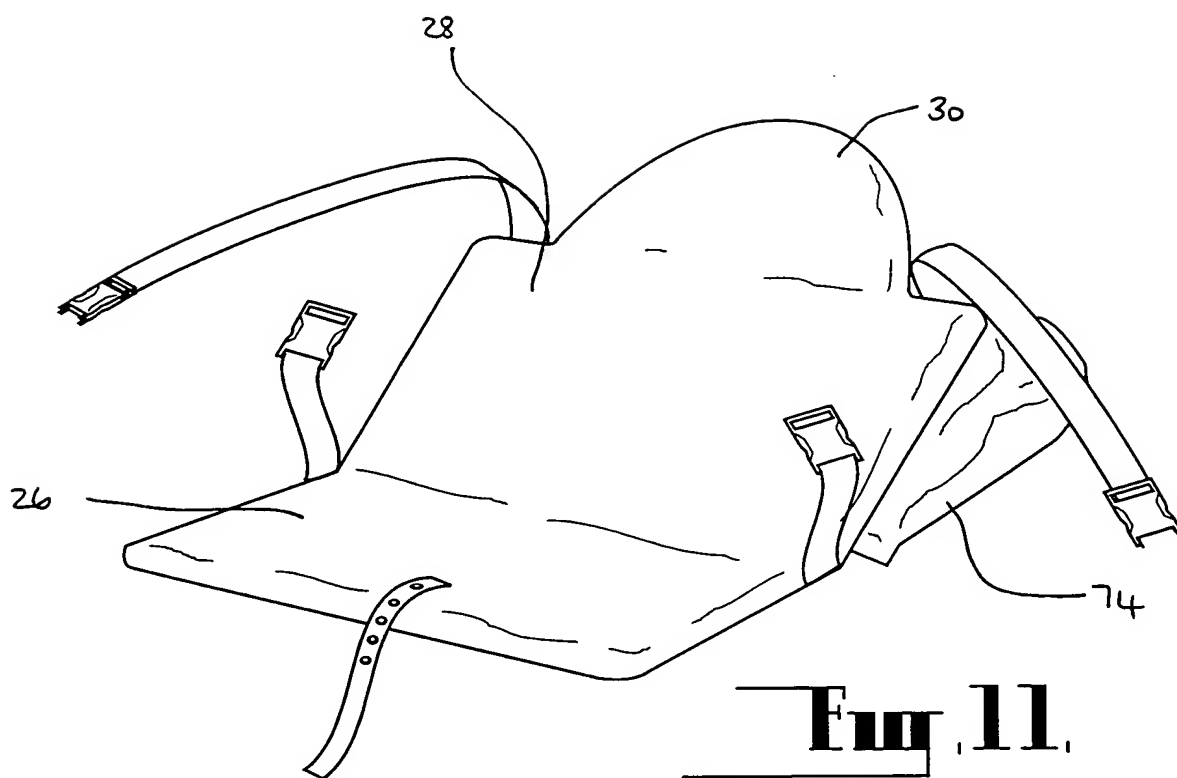


Fig. 10.



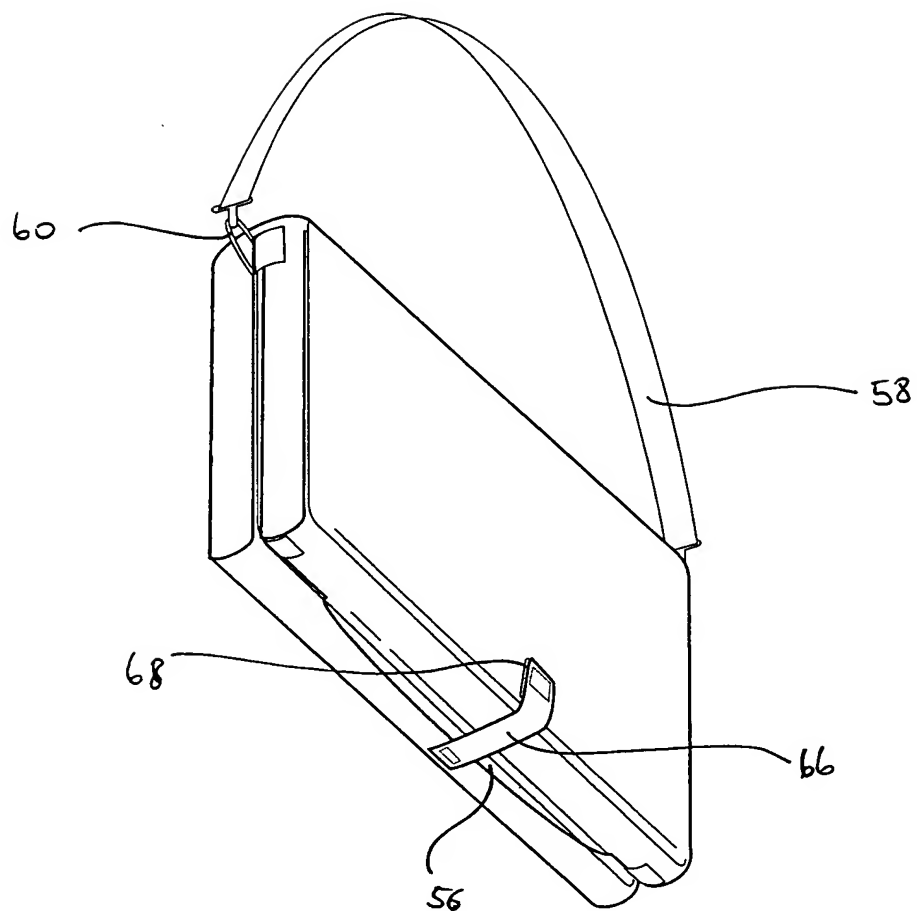


Fig. 13.

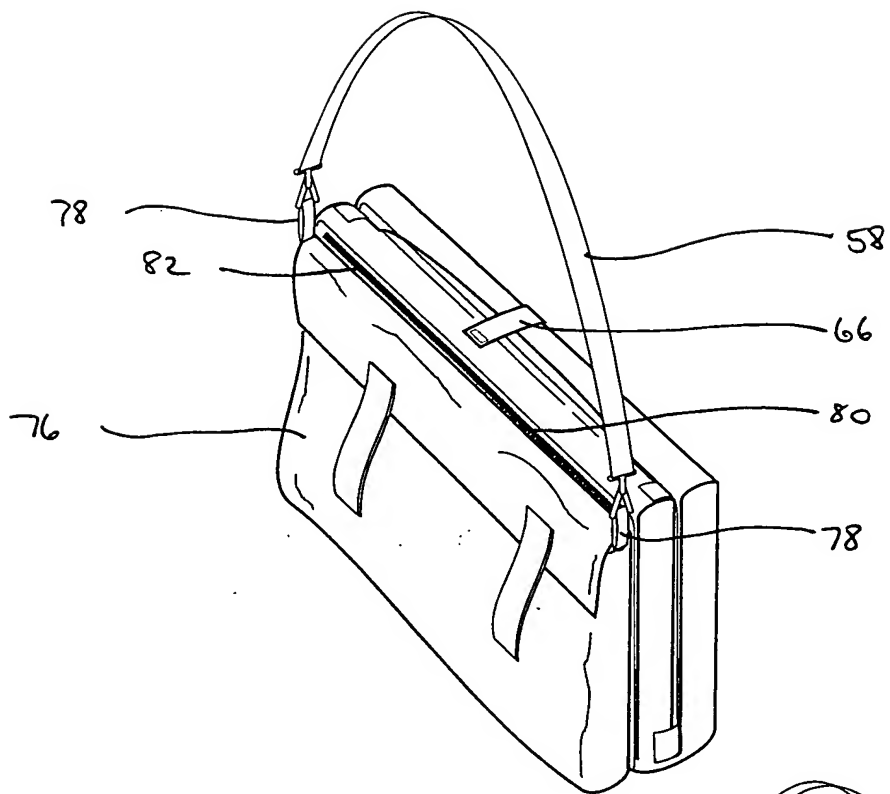


Fig. 14.

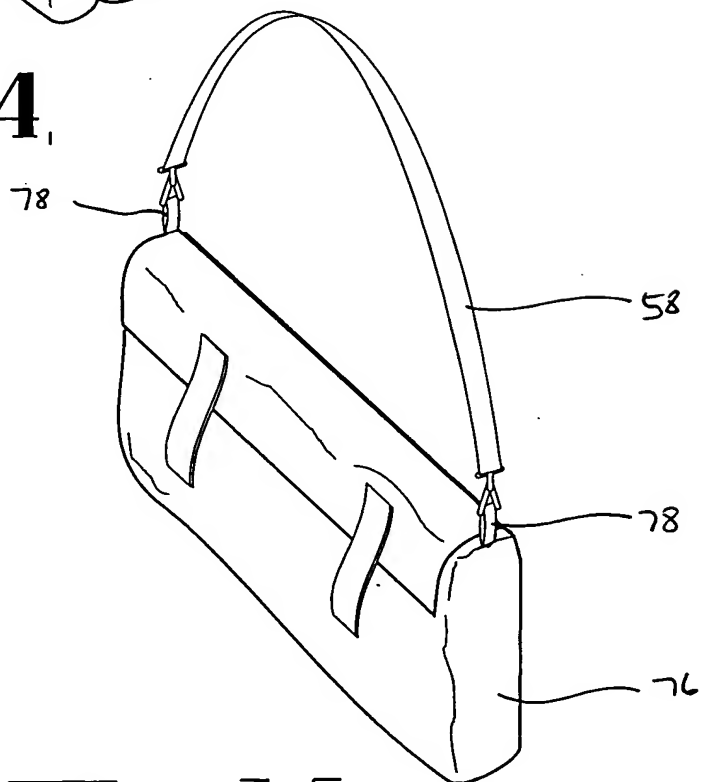


Fig. 15.

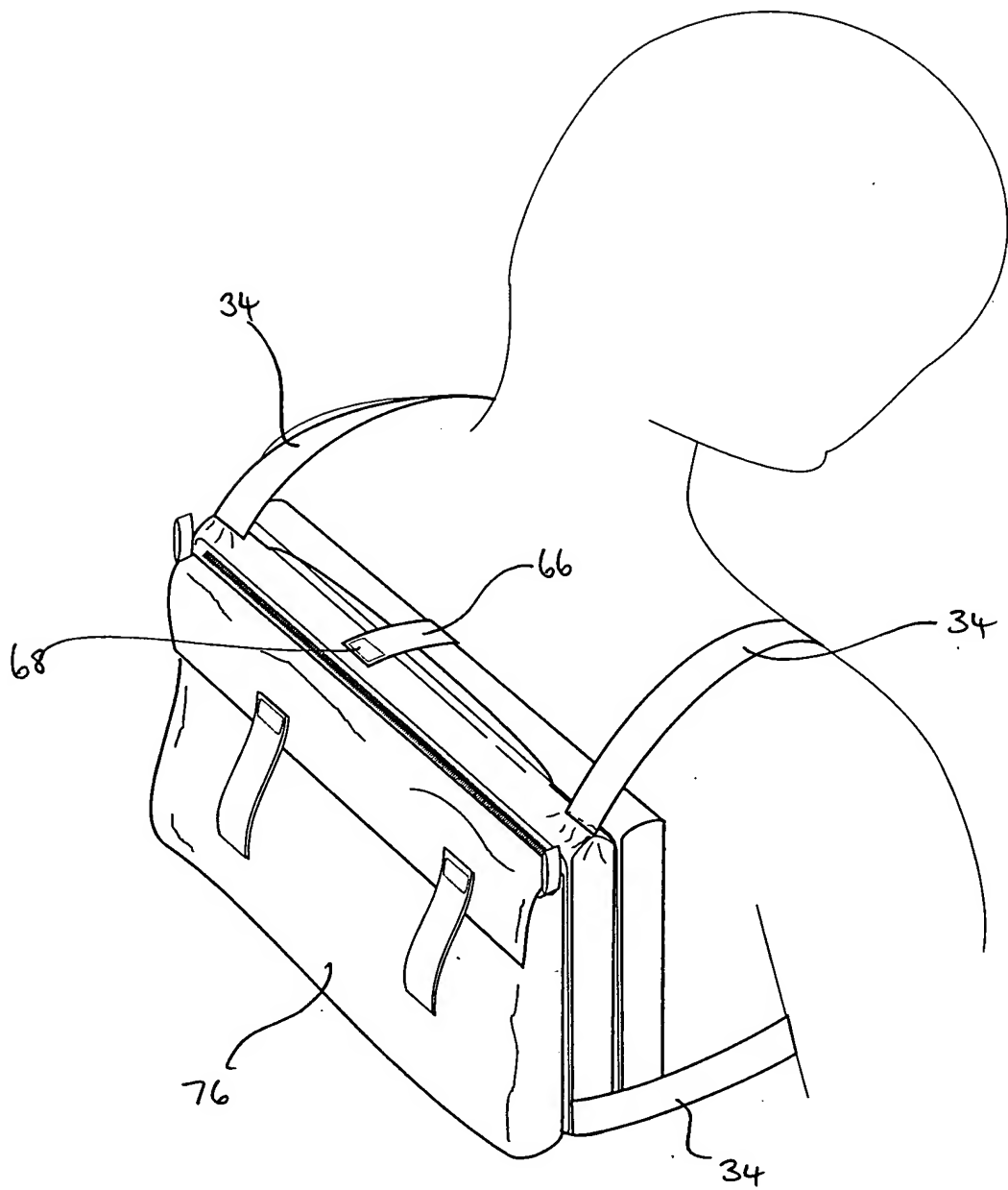


Fig. 16.